

## CLAIMS

1. A method in a communication device (CD) for providing short-slot-cycle paging information to a base station (BS), the method comprising:  
determining whether the BS is capable of short-slot-cycle paging; and  
indicating that the CD is also capable for short-slot-cycle paging if the BS is determined to be capable of short-slot-cycle paging.
2. The method of claim 1, further including setting a negative slot-cycle-index value for said short-slot-cycle paging.
3. The method of claim 2, wherein the negative slot-cycle-index value includes one of “-1,” “-2,” “-3,” or “-4.”
4. The method of claim 1, wherein said determining includes examining system parameter messages including extended system parameter messages (ESPM).
5. The method of claim 1, wherein said determining includes examining system parameter messages including ANSI-41 system parameter messages (A41SPM).
6. The method of claim 1, wherein said determining includes examining whether AUTO\_MSG\_SUPPORTED field is set to “1.”
7. The method of claim 1, wherein said indicating includes setting WLL\_INCL to “1” in one of registration message, origination message, or page response message.
8. The method of claim 7, further including setting a desired slot cycle duration in a SLOT-CYCLE-INDEX field.
9. The method of claim 7, further including setting a desired slot cycle duration in a WLL-DEVICE-TYPE field.

10. The method of claim 1, wherein said indicating includes setting a SLOT-CYCLE-INDEX with a most significant bit of “1” in one of registration message, origination message, or page response message.

11. A method in a base station (BS) for providing short-slot-cycle paging, the method comprising:

indicating to a communication device (CD) that the BS is capable of short-slot-cycle paging;

receiving information from the CD, indicating that the CD is also capable for short-slot-cycle paging; and

paging the CD based on the received information.

12. The method of claim 11, wherein said paging includes paging the CD based on a negative slot-cycle-index value.

13. The method of claim 11, wherein said indicating includes setting AUTO\_MSG\_SUPPORTED field to “1” in extended system parameter messages (ESPM).

14. The method of claim 11, wherein said indicating includes setting AUTO\_MSG\_SUPPORTED field to “1” in ANSI-41 system parameter messages (A41SPM).

15. The method of claim 11, wherein the information includes WLL\_INCL field set “1” in one of registration message, origination message, or page response message.

16. The method of claim 15, wherein the information further includes a desired slot cycle duration in a SLOT-CYCLE-INDEX field.

17. The method of claim 15, wherein the information further includes a desired slot cycle duration in a WLL-DEVICE-TYPE field.

18. The method of claim 11, wherein the information includes a SLOT-CYCLE-INDEX with a most significant bit of "1" in one of registration message, origination message, or page response message.

19. A computer-readable medium storing codes for enabling a processor to perform a method for in a communication device (CD) for providing short-slot-cycle paging information to a base station (BS), the method comprising:

determining whether the BS is capable of short-slot-cycle paging; and

indicating that the CD is also capable for short-slot-cycle paging if the BS is determined to be capable of short-slot-cycle paging.

20. The computer-readable medium of claim 19, the method further including setting a negative slot-cycle-index value for said short-slot-cycle paging.

21. The computer-readable medium of claim 20, wherein the negative slot-cycle-index value includes one of "-1," "-2," "-3," or "-4."

22. The computer-readable medium of claim 19, wherein said determining includes examining system parameter messages including extended system parameter messages (ESPM).

23. The computer-readable medium of claim 19, wherein said determining includes examining system parameter messages including ANSI-41 system parameter messages (A41SPM).

24. The computer-readable medium of claim 19, wherein said determining includes examining whether AUTO\_MSG\_SUPPORTED field is set to "1."

25. The computer-readable medium of claim 19, wherein said indicating includes setting WLL\_INCL to "1" in one of registration message, origination message, or page response message.

26. The computer-readable medium of claim 25, the method further including setting a desired slot cycle duration in a SLOT-CYCLE-INDEX field.

27. The computer-readable medium of claim 25, the method further including setting a desired slot cycle duration in a WLL-DEVICE-TYPE field.

28. The computer-readable medium of claim 19, wherein said indicating includes setting a SLOT-CYCLE-INDEX with a most significant bit of "1" in one of registration message, origination message, or page response message.

29. A computer-readable medium in a base station (BS) for providing short-slot-cycle paging, the method comprising:

indicating to a communication device (CD) that the BS is capable of short-slot-cycle paging;

receiving information from the CD, indicating that the CD is also capable for short-slot-cycle paging; and

paging the CD based on the received information.

30. The computer-readable medium of claim 29, wherein said paging includes paging the CD based on a negative slot-cycle-index value.

31. The computer-readable medium of claim 29, wherein said indicating includes setting AUTO\_MSG\_SUPPORTED field to "1" in extended system parameter messages (ESPM).

32. The computer-readable medium of claim 29, wherein said indicating includes setting AUTO\_MSG\_SUPPORTED field to "1" in ANSI-41 system parameter messages (A41SPM).

33. The computer-readable medium of claim 29, wherein the information includes WLL\_INCL field set "1" in one of registration message, origination message, or page response message.

34. The computer-readable medium of claim 33, wherein the information further includes a desired slot cycle duration in a SLOT-CYCLE-INDEX field.

35. The computer-readable medium of claim 33, wherein the information further includes a desired slot cycle duration in a WLL-DEVICE-TYPE field.

36. The computer-readable medium of claim 29, wherein the information includes a SLOT-CYCLE-INDEX with a most significant bit of "1" in one of registration message, origination message, or page response message.

37. A communication device (CD) for providing short-slot-cycle paging information to a base station (BS), comprising:

means for determining whether the BS is capable of short-slot-cycle paging; and

means for indicating that the CD is also capable for short-slot-cycle paging if the BS is determined to be capable of short-slot-cycle paging.

38. The CD of claim 37, further including means for setting a negative slot-cycle-index value for said short-slot-cycle paging.

39. The CD of claim 37, wherein the negative slot-cycle-index value includes one of "-1," "-2," "-3," or "-4."

40. The CD of claim 37, wherein said means for determining includes means for examining system parameter messages including extended system parameter messages (ESPM).

41. The CD of claim 37, wherein said means for determining includes means for examining system parameter messages including ANSI-41 system parameter messages (A41SPM).

42. The CD of claim 37, wherein said means for determining includes means for examining whether AUTO\_MSG\_SUPPORTED field is set to "1."

43. The CD of claim 37, wherein said means for indicating includes means for setting WLL\_INCL to "1" in one of registration message, origination message, or page response message.

44. The CD of claim 43 further including means for setting a desired slot cycle duration in a SLOT-CYCLE-INDEX field.

45. The CD of claim 43, further including means for setting a desired slot cycle duration in a WLL-DEVICE-TYPE field.

46. The CD of claim 37, wherein said means for indicating includes means for setting a SLOT-CYCLE-INDEX with a most significant bit of "1" in one of registration message, origination message, or page response message.

47. A base station (BS) for providing short-slot-cycle paging, comprising:  
means for indicating to a communication device (CD) that the BS is capable of short-slot-cycle paging;  
means for receiving information from the CD, indicating that the CD is also capable for short-slot-cycle paging; and  
means for paging the CD based on the received information.

48. The BS of claim 47, wherein said means for paging includes means for paging the CD based on a negative slot-cycle-index value.

49. The BS of claim 47, wherein said means for indicating includes means for setting AUTO\_MSG\_SUPPORTED field to "1" in extended system parameter messages (ESPM).

50. The BS of claim 47, wherein said means for indicating includes means for setting AUTO\_MSG\_SUPPORTED field to "1" in ANSI-41 system parameter messages (A41SPM).

51. The BS of claim 47, wherein the information includes WLL\_INCL field set "1" in one of registration message, origination message, or page response message.

52. The BS of claim 51, wherein the information further includes a desired slot cycle duration in a SLOT-CYCLE-INDEX field.

53. The BS of claim 51, wherein the information further includes a desired slot cycle duration in a WLL-DEVICE-TYPE field.

54. The BS of claim 47, wherein the information includes a SLOT-CYCLE-INDEX with a most significant bit of "1" in one of registration message, origination message, or page response message.

55. A communication device (CD) for providing short-slot-cycle paging information to a base station (BS), comprising:

a receiver capable of receiving information from a base station (BS);

a transmitter capable of transmitting information to the BS; and

a processor capable of carrying out a method for providing short-slot-cycle paging information to a base station (BS), the method comprising:

determining whether the BS is capable of short-slot-cycle paging; and

indicating that the CD is also capable for short-slot-cycle paging if the BS is determined to be capable of short-slot-cycle paging.

56. The CD of claim 55, the method further including setting a negative slot-cycle-index value for said short-slot-cycle paging.

57. The CD of claim 55, wherein the negative slot-cycle-index value includes one of "-1," "-2," "-3," or "-4."

58. The CD of claim 55, wherein said determining includes examining system parameter messages including extended system parameter messages (ESPM).

59. The CD of claim 55, wherein said determining includes examining system parameter messages including ANSI-41 system parameter messages (A41SPM).

60. The CD of claim 55, wherein said determining includes examining whether AUTO\_MSG\_SUPPORTED field is set to "1."

61. The CD of claim 55, wherein said indicating includes setting WLL\_INCL to "1" in one of registration message, origination message, or page response message.

62. The CD of claim 61, the method further including setting a desired slot cycle duration in a SLOT-CYCLE-INDEX field.

63. The CD of claim 61, the method further including setting a desired slot cycle duration in a WLL-DEVICE-TYPE field.

64. The CD of claim 55, wherein said indicating includes setting a SLOT-CYCLE-INDEX with a most significant bit of "1" in one of registration message, origination message, or page response message.

65. A base station (BS) for providing short-slot-cycle paging, comprising:  
a receiver capable of receiving information from a communication device (CD);  
a transmitter capable of transmitting information to the CD; and  
a processor capable of carrying out a method for providing short-slot-cycle paging, the method comprising:

indicating to the CD that the BS is capable of short-slot-cycle paging;  
receiving information from the CD, indicating that the CD is also capable for short-slot-cycle paging; and  
paging the CD based on the received information.

66. The BS claim 65, wherein said paging includes paging the CD based on a negative slot-cycle-index value.



67. The BS of claim 65, wherein said indicating includes setting AUTO\_MSG\_SUPPORTED field to “1” in extended system parameter messages (ESPM).

68. The BS of claim 65, wherein said indicating includes setting AUTO\_MSG\_SUPPORTED field to “1” in ANSI-41 system parameter messages (A41SPM).

69. The BS of claim 65, wherein the information includes WLL\_INCL field set “1” in one of registration message, origination message, or page response message.

70. The BS of claim 69, wherein the information further includes a desired slot cycle duration in a SLOT-CYCLE-INDEX field.

71. The BS of claim 69, wherein the information further includes a desired slot cycle duration in a WLL-DEVICE-TYPE field.

72. The BS of claim 65, wherein the information includes a SLOT-CYCLE-INDEX with a most significant bit of “1” in one of registration message, origination message, or page response message.